PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	Docket No: Q95983
Yuzo SENDA	
Appln. No.: 10/586,541	Group Art Unit: 2133
Confirmation No.: 4649	Examiner: Not Yet Assigned
Filed: July 19, 2006	

For: PARITY CHECK MATRIX GENERATION METHOD, DATA TRANSMISSION SYSTEM, ENCODING DEVICE, DECODIING DEVICE, AND A PARITY CHECK MATRIX GENERATION PROGRAM

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith, except for the following: U.S. patents and/or U.S. patent publications; and co-pending non-provisional U.S. applications filed after June 30, 2003.

1. Matsumoto et al. "Irregular low-density parity-check code design based on euclidean geometries" IEICE transactions on fundamentals. July 2003, Pgs. 1820-1834, Vol. E86-A, No. 7, Tokyo, Japan XP001174812

2. Matsumoto et al. "Irregular low-density parity-check code design based on integer lattices" Proceedings 2003 IEEE international., June 29-July 4, 2003, Pg. 3, New York, NY XP010657031

3. LEHMANN "Distance properties of irregular ldpc codes" Proceedings 2003 IEEE International, June 29-July 4, 2003, New York, NY, pg. 85 XP010657113

4. TIAN et al. "Construction of irregular LDPC codes with low error floors" IC 2003. 2003 IEEE International, May 11-15, 2003, New York, NY, vol. 4 pgs. 3125-3129 XP010643022

5. YANG et al. "Design of efficiently encodable moderate-length high-rate irregular LDPC codes" Proceedings of the annual conference on communication, control and computing, October 2002 pgs. 1415-1424 XP 009042018

6. LUBY et al. "Improved low-density parity-check codes using irregular graphs and belief propagation" information theory, 1998. Proceedings. Cambridge, MA, pg. 117 XP 010297081

7. ROSENTHAL et al. "Constructions of regular and irregular LDPC codes using Ramanujan graphs and ideas from margulis" Proceedings of the 2001 IEEE International Symposium on information theory. June 2001 pg. 4 New York, NY XP 010552621

8. MANNOAI et al. "Optimized irregular gallager codes for OFDM transmission" Personal, indoor and mobile radio communications, 2002. Vol. 1 pgs. 222-226 XP010614219

9. ECHARD et al. "Irregular/spl pi/-rotation LDPC codes" Globecom 02. IEEE Global telecommunications conference, New York, NY Vol. 2, November 2002 pgs. 1274-1278 XP010636350

10. HA et al. "Optimal puncturing of irregular low-density parity-check codes" IEEE International conference on communications, New York, NY Vol. 5 May 2003 pgs. 3110-3114 XP010643019

11. KASAI et al. "Detailed representation of irregular ldpc code ensembles and density evolution" IEEE international symposium on information theory, New York, NY June 2003 pgs. 121 XP010657149

12. YANG et al. "Lowering the error-rate floors of moderate-length high-rate irregular ldpc codes" IEEE international symposium on information theory, New York, NY June 2003 pgs. 237 XP010657265

13. RASHIDPOUR et al. "Low-density parity-check codes with simple irregular semi-random parity-check matrix for finite-length applications" Personal, indoor and mobile radio communications, 2003. PIMRC 2003. 14th IEEE proceedings, September 2003 pgs. 439-443 XP 010681634

14. LIUGUO et al. "Modified belief-propagation algorithm for decoding of irregular low-density parity-check codes" Electronics letters, vol. 38, no. 24, November 2002 pgs. 1551-1553 XP 006019345

15. JOHNSON et al. "A family of irregular ldpc codes with low encoding complexity" IEEE Communications letters, IEEE service center, Piscataway, NJ vol. 7, no. 2, February 2003 XP011066488

Applicants also submits a Supplemental Search Report dated January 13, 2009 issued in corresponding European Application No. 05703708. Non-Patent Literature references "Design of capacity-approaching irregular low-density parity-check codes" by Richardson et al. and "Efficient erasure correcting codes" by Luby et al. which are also cited in the attached Search Report were previously cited in an Information Disclosure Statement filed on July 19, 2006.

The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date; (2) Before the mailing date of the first Office Action on the merits (whichever is later); or (3) Before the mailing date of the first Office Action after filing a request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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